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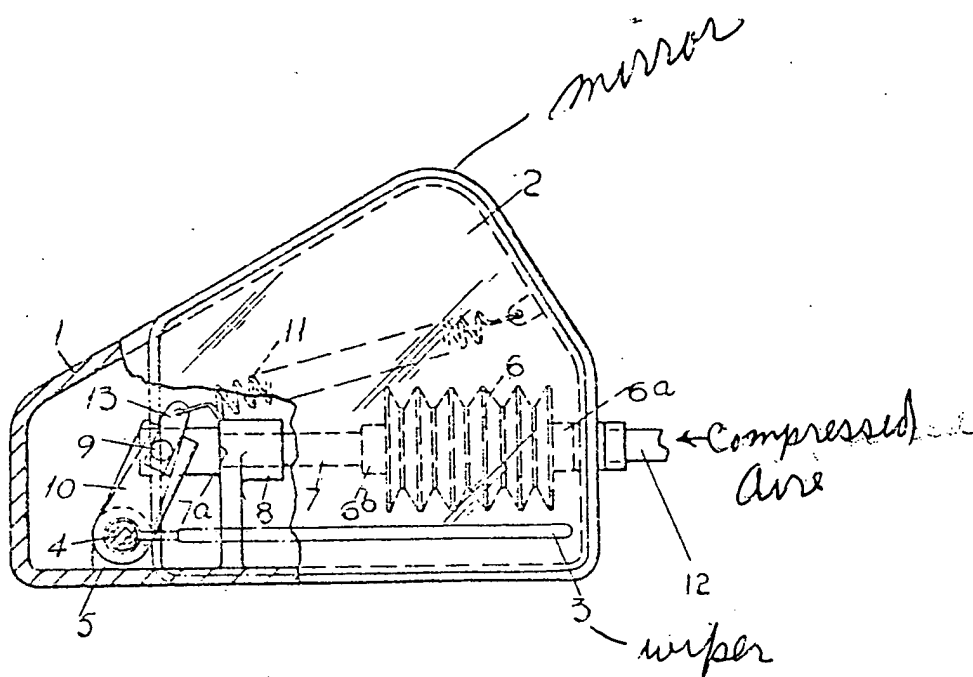
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COMPLETE SPECIFICATION

1 SHEET

This drawing is a reproduction of
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PATENT SPECIFICATION

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DRAWINGS ATTACHED:

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COMPLETE SPECIFICATION.

Observation Mirrors for Vehicles.

I, HAROLD PERCY SMALLBONE, of 116 Raddlebarn Road, Selly Oak, in the City of Birmingham 29, a British Subject, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to observation mirrors of the kind adapted to be mounted on the exterior of a vehicle in order to provide the driver with a view to the rear of the vehicle.

The object of the present invention is to provide an observation mirror of the kind specified having means for cleaning the mirror in bad weather when required.

In accordance with the invention, an observation mirror of the kind specified includes a reflector, a pivotable wiper member which engages the surface of said reflector, and means for pivoting the wiper member over a limited range of movement, said means being operable from the interior of the vehicle.

The means for pivoting the wiper member may be operated by means of compressed air, by suction, by manual operating (e.g. by using a flexible cable), by means of an electric motor arranged to drive a flexible shaft, by means of a solenoid, or in any other convenient manner. To this end the reflector may be mounted in a holder or body and the wiper member may be connected to a spindle which extends through said holder or body so as to be connected on that side of the holder or body remote from the reflector to an arm which is itself connected to said means for pivoting the wiper member. Alternatively, the means for pivoting the wiper member may comprise an external attachment fitted to an existing mirror.

The invention will now be more particularly described with reference to the accompanying drawing which shows, partly in section, one example of an observation mirror in accordance with the invention:

As shown in the drawing the mirror includes a body or holder 1 in which a reflector 2 is mounted. Pivotally mounted at one end of the body or holder 1 is a wiper member 3 in the form of a blade which engages the outer surface of the reflector 2. The blade 3 is secured to a spindle 4 carried by bearings 5 in the body or holder 1.

Means are provided for pivoting the wiper 3 relative to the body or holder 1, such means including pneumatically operable means in the form of a bellows 6 which is secured at the end 6a to the body or holder 1 and which has an air connection 12. Secured to the other end 6b of the bellows is an actuating rod 7 which extends through a sleeve 8 secured to or formed in the body or holder 1. The rod 7 has a shoulder 7a which seats on the end of the sleeve 8 to limit movement of the rod 7 in one direction. The rod 7 carries a projecting peg 9 which extends between the limbs of the bifurcated free end of an arm 10 secured to the spindle 4. Resilient means in the form of a tension spring 11 is connected between the end of a further arm 13 on the spindle 4 and the body or holder 1 and serves resiliently to urge the rod to the rest position (shown in the drawing) in which the shoulder 7a is seated against the sleeve 8.

In use the connection 12 is connected to a source of compressed air, in the vehicle on which the mirror is mounted, through the intermediary of a manually operable valve (not shown) in the interior of the vehicle. Thus, when the mirror becomes obscured by snow or rain, the valve can be operated to

clear the face of the reflector. It will be realized that the admission of compressed air into the bellows 6 causes the latter to be expanded so that the wiper 3 is pivoted across the face of the reflector.

With minor modifications the example described could be operated by suction in which case the connection 12 could be connected to the inlet manifold of the engine of the vehicle.

WHAT I CLAIM IS:—

1. An observation mirror of the kind specified comprising a reflector, a pivotable wiper member which engages the surface of said reflector, and means for pivoting the wiper member over a limited range of movement, said means being operable from the interior of the vehicle.

2. An observation mirror as claimed in Claim 1 wherein the reflector is supported in a body or holder through which a spindle projects, the wiper member being mounted on one end of the spindle and an arm being mounted on the other end, said arm being operatively connected to said means for pivoting the wiper member.

3. An observation mirror as claimed in Claim 2 wherein said means for pivoting the wiper member comprises pneumatically operable means for pivoting the wiper in one direction and resilient means for pivoting the wiper in the opposite direction.

4. An observation mirror as claimed in Claim 3 wherein said pneumatically operable means comprises a bellows.

5. An observation mirror as claimed in Claim 4 wherein said bellows is secured at one end to the body or holder and at the other end to a rod operatively connected to said arm.

6. An observation mirror as claimed in Claim 5 wherein said bellows is arranged to be expanded by the admission of compressed air thereto to move said rod out of a rest position to which it is urged by said resilient means.

7. An observation mirror as claimed in Claim 6 wherein said resilient means is in the form of a tension spring connected between a further arm on the spindle and the body or holder.

8. An observation mirror as claimed in any one of Claims 3 to 7 inclusive wherein said pneumatically operable means is controllable by a valve in the interior of the vehicle on which the mirror is adapted to be mounted.

9. An observation mirror substantially as hereinbefore described with reference to and as shown in the accompanying drawing.

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